

IT IS THE VENDOR'S RESPONSIBILITY TO CHECK FOR
ADDENDUMS PRIOR TO SUBMITTING PROPOSALS

**NOTICE TO BIDDERS
SPECIFICATION NO. 03-217**

City of Lincoln intends to enter into contract and invites you to submit a sealed bid for:

**ONE (1) GRAPHITE FURNACE ATOMIC
ABSORPTION SYSTEM
FOR
CITY OF LINCOLN WATER DEPARTMENT**

MEETING OR EXCEEDING CITY OF LINCOLN'S SPECIFICATIONS

Sealed bids will be received by City of Lincoln, Nebraska on or before **12:00 noon Central Time, Wednesday, August 27, 2003**, in the office of the Purchasing Agent, "**K" Street Complex (SW Wing), Suite 200, 440 So. 8th Street**, Lincoln, NE 68508. Bids will be publicly opened and read aloud in the First Floor Conference Room at the "K" Street Complex.

Bidders should take caution if U.S. mail or mail delivery services are used for the submission of bids. Mailing should be made in sufficient time for bids to arrive in the Purchasing Division, prior to the time and date specified above. Late bid will not be considered.

SEALED BID SPECIFICATION NO. 03-217

BID OPENING TIME: 12:00 NOON
DATE: Wednesday, August 27, 2003

ADDENDA RECEIPT: The receipt of the addenda to the specification number ____ through ____ is hereby acknowledged. Failure of any bidder to receive any addenda or interpretation shall not relieve the bidder from obligations specified in the bid request. All addenda shall become part of the final contract document.

The undersigned submitter, having full knowledge of the requirements of City of Lincoln for the listed project agrees to provide the labor, certificate of insurance, materials and equipment in strict accordance with the specifications as prepared by the City for the consideration of the amount set forth in the following price schedule:

ONE (1) GRAPHITE FURNACE ATOMIC ABSORPTION SYSTEM

	<u>DESCRIPTION</u>	<u>QTY</u>	<u>TOTAL PRICE</u>
1.	Graphite Furnace Atomic Absorption Sys., as per specifications: (Complete with standard accessories, freight & delivery) MFG./MAKE/MODEL: _____ 12 MONTH WARRANTY: _____ <u>OPTIONS:</u> 1.1 Lamp for manganese and iron detection: _____ 1.2 Graphite Furnace AA Auto sampling: _____	1 ea	\$ _____
2.	Price for extended warranty (after the original mfgs. warranty):	1 ea	\$ _____
3.	Service agreement for one-year:	1 ea.	\$ _____

NO BID BOND REQUIRED

**NOTE: RETURN 2 COMPLETE COPIES OF BID OFFER AND SUPPORTING MATERIAL.
MARK OUTSIDE OF BID ENVELOPE AS FOLLOWS: SEALED BID FOR SPEC. NO. 03-217**

The undersigned signatory of the bidder represents and warrants that he has full and complete authority to submit this offer to City of Lincoln, and to enter into a contract if this offer is accepted.

COMPANY NAME

BY (Signature)

STREET ADDRESS or P.O. BOX

(Print Name)

CITY, STATE ZIP CODE

(Title)

TELEPHONE NO.

(Date)

FAX NO.

EMPLOYER'S FEDERAL I.D. NO.
OR SOCIAL SECURITY NUMBER

Email: _____

BIDS MAY BE INSPECTED IN THE PURCHASING OFFICES DURING NORMAL BUSINESS HOURS, AFTER TABULATION. IF YOU DESIRE A COPY OF THE BID TABULATION TO BE MAILED TO YOU, YOU MUST ENCLOSE A SELF-ADDRESSED STAMPED ENVELOPE WITH YOUR BID.

INSTRUCTIONS TO BIDDERS

CITY OF LINCOLN, NEBRASKA PURCHASING DIVISION

1. BIDDING PROCEDURE

- 1.1 Bidder shall submit two (2) complete sets of the bid documents and all supporting material. All appropriate blanks shall be completed. Any interlineation, alteration or erasure on the specification document shall be initialed by the signer of the bid. Bidder shall not change the proposal form nor make additional stipulations on the specification document. Any amplified or qualifying information shall be on the bidder's letterhead and firmly attached to the specification document.
- 1.2 Bid prices shall be submitted on the Proposal Form included in the bid document.
- 1.3 Bidders may submit a bid on an "all or none" or "lump sum" basis, but should also submit a quotation on an item-by-item basis. Bidding documents shall be clearly marked indicating the kind of proposal being submitted.
- 1.4 Each bid must be legibly printed in ink or by typewriter, include the full name, business address, and telephone number of the bidder; and be signed in ink by the bidder.
- 1.5 A bid by a firm or organization other than a corporation must include the name and address of each member.
- 1.6 A bid by a corporation must be signed in the name of such corporation by a duly authorized official thereof.
- 1.7 Any person signing a bid for a firm, corporation, or other organization must show evidence of his authority so to bind such firm, corporation, or organization.
- 1.8 Bids received after the time and date established for receiving bids will be rejected.

2. BIDDER'S SECURITY

- 2.1 Bid security, as a guarantee of good faith, in the form of a certified check, cashier's check, or bidder's bond, may be required to be submitted with this bid document, as indicated of the Proposal Form.
- 2.2 If alternate bids are submitted, only one bid security will be required, provided the bid security is based on the amount of the highest gross bid.
- 2.3 Such bid security will be returned to the unsuccessful bidders when the award of bid is made.
- 2.4 Bid security will be returned to the successful bidder(s) as follows:
 - 2.4.1 For single order bids with specified quantities: upon the delivery of all equipment or merchandise, and upon final acceptance by the City.
 - 2.4.2 For all other contracts: upon approval by the City of the executed contract and bonds.
- 2.5 City shall have the right to retain the bid security of bidders to whom an award is being considered until either:
 - 2.5.1 A contract has been executed and bonds have been furnished.
 - 2.5.2 The specified time has elapsed so that the bids may be withdrawn.
 - 2.5.3 All bids have been rejected.

- 2.6 Bid security will be forfeited to the City as full liquidated damages, but not as a penalty, for any of the following reasons, as pertains to this specification document:

- 2.6.1 If the bidder fails to deliver the equipment or merchandise in full compliance with the accepted proposal and specifications.
- 2.6.2 If the bidder fails or refuses to enter into a contract on forms provided by the City, and/or if the bidder fails to provide sufficient bonds or insurance within the time period as established in this specification document.

3. EQUAL OPPORTUNITY

- 3.1 Each bidder agrees that it will not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, ancestry, disability, age, or marital status. Bidder shall fully comply with the provisions of Chapter 11.08 of the Lincoln Municipal Code.
- 3.2 Successful bidder will be required to comply with the provisions of the City's Affirmative Action Policy (Contract Compliance, Sec. 1.16).
- 3.3 The Equal Opportunity Officer will determine compliance or non-compliance with the City's Affirmative Action Policy upon a complete and substantial review of successful bidder's equal opportunity policies, procedures and practices.

4. DATA PRIVACY

- 4.1 Bidder agrees to abide by all applicable State and Federal laws and regulations concerning the handling and disclosure of private and confidential information concerning individuals and corporations as to inventions, copyrights, patents and patent rights.
- 4.2 The bidder agrees to hold the City harmless from any claims resulting from the bidder's unlawful disclosure or use of private or confidential information.

5. BIDDER'S REPRESENTATION

- 5.1 Each bidder by signing and submitting a bid, represents that the bidder has read and understands the specification documents, and the bid has been made in accordance therewith.
- 5.2 Each bidder for services further represents that the bidder is familiar with the local conditions under which the work is to be done and has correlated the observations with the requirements of the bid documents.

6. INDEPENDENT PRICE DETERMINATION

- 6.1 By signing and submitting this bid, the bidder certifies that the prices in this bid have been arrived at independently, without consultation, communication or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or with any competitor; unless otherwise required by law, the prices which have been quoted in this bid have not been knowingly disclosed by the bidder prior to bid opening directly or indirectly to any other bidder or to any competitor; no attempt has been made, or will be made, by the bidder to induce any person or firm to submit, or not to submit, a bid for the purpose of restricting competition.

7. CLARIFICATION OF SPECIFICATION DOCUMENTS

- 7.1 Bidders shall promptly notify the Purchasing Agent of any ambiguity, inconsistency or error which they may discover upon examination of the specification documents.
- 7.2 Bidders desiring clarification or interpretation of the specification documents shall make a written request which must reach the Purchasing Agent at least seven (7) calendar days prior to the date and time for receipt of bids.
- 7.3 Interpretations, corrections and changes made to the specification documents will be made by written addenda.
- 7.4 Oral interpretations or changes to the Specification Documents made in any other manner, will not be binding on the City; and bidders shall not rely upon such interpretations or changes.

8. ADDENDA

- 8.1 Addenda are written instruments issued by the City prior to the date for receipt of bids which modify or interpret the specification document by addition, deletion, clarification or correction.
- 8.2 Addenda will be mailed or delivered to all who are known by the City to have received a complete set of specification documents.
- 8.3 Copies of addenda will be made available for inspection at the office of the Purchasing Agent.
- 8.4 No addendum will be issued later than forty-eight (48) hours prior to the date and time for receipt of bids, except an addendum withdrawing the invitation to bid, or an addendum which includes postponement of the bid.
- 8.5 Bidders shall ascertain prior to submitting their bid that they have received all addenda issued, and they shall acknowledge receipt of addenda on the proposal form.

9. ANTI-LOBBYING PROVISION

- 9.1 During the period between the bid close date and the contract award, bidders, including their agents and representatives, shall not directly discuss or promote their bid with any member of the City Council or City Staff except in the course of City-sponsored inquiries, briefings, interviews, or presentations, unless requested by the City.

10. BRAND NAMES

- 10.1 Wherever in the specifications or proposal form brand names, manufacturer, trade name, or catalog numbers are specified, it is for the purpose of establishing a grade or quality of material only; and the term "or equal" is deemed to follow.
- 10.2 It is the bidder's responsibility to identify any alternate items offered in the bid, and prove to the satisfaction of the City that said item is equal to, or better than, the product specified.
- 10.3 Bids for alternate items shall be stated in the appropriate brand on the proposal form, or if the proposal form does not contain blanks for alternates, bidder MUST attach to the specification documents on Company letterhead a statement identifying the manufacturer and brand name of each proposed alternate, plus a complete description of the alternate items including illustrations, performance test data and any other information necessary for an evaluation. The bidder must indicate any variances by item number from the specification document no matter how slight. Bidder must fully explain the variances from the specification document, since brochure information may not be sufficient.

- 10.4 If variations are not stated in the proposal, it will be assumed that the item being bid fully complies with the City's specifications.

11. DEMONSTRATIONS/SAMPLES

- 11.1 Bidders shall demonstrate the exact item(s) proposed within seven (7) calendar days from receipt of such request from the City.
- 11.2 Such demonstration can be at the City delivery location or a surrounding community.
- 11.3 If bidder does not have an item in the area, it will be at the bidder's expense to send appropriate City personnel to the nearest location to view and inspect proposed item(s).
- 11.4 If items are small and malleable, and the bidder is proposing an alternate product, the bidder MUST supply a sample of the exact item. Samples will be returned at bidder's expense after receipt by the City of acceptable goods. Bidders must indicate how samples are to be returned.

12. DELIVERY

- 12.1 Each bidder shall state on his proposal form the date upon which he can make delivery of all equipment or merchandise. Time required for delivery is hereby made an essential element of the bid.
- 12.2 The City reserves the right to cancel orders, or any part thereof, without obligation, if delivery is not made within the time(s) specified on the proposal form.
- 12.3 All bids shall be based upon **inside** delivery of the equipment or merchandise F.O.B. the City at the location specified by the City, with all transportation charges paid.

13. WARRANTIES, GUARANTEES AND MAINTENANCE

- 13.1 Copies of the following documents must accompany the bid proposal for all items being bid:
 - 13.1.1 Manufacturer's warranties and/or guarantees.
 - 13.1.2 Bidder's maintenance policies and associated costs.
- 13.2 As a minimum requirement of the City, the bidder will guarantee in writing that any defective components discovered within a one (1) year period after the date of acceptance shall be replaced at no expense to the City. Replacement parts of defective components shall be shipped at no cost to the City. Shipping costs for defective parts required to be returned to the bidder shall be paid by the bidder.
- 13.3 Bidder Warrants and represents to the City that all software/firmware/ hardware/equipment /systems developed, distributed, installed or programmed by Bidder pursuant to this Specification and Agreement.
 - 13.3.1 That all date recognition and processing by the software/firmware/hardware/equipment/system will include the four-digit-year format and will correctly recognize and process the date of February 29, and any related data, during Leap years; and
 - 13.3.2 That all date sorting by the software /firmware/hardware/ equipment/system that includes a "year category" shall be done based on the four-digit-year format. Upon being notified in writing by the City of the failure of any software/ firmware/ hardware /equipment /systems to comply with this Specification and Agreement, Contractor will, within 60 days and at no cost to the City, replace or correct the non-

complying software/ firmware/ hardware/ equipment/ systems with software/firmware/ hardware/equipment/ systems that does comply with this Specification and Agreement.

- 13.3.3 No Disclaimers: The warranties and representations set forth in this section 13.3 shall not be subject to any disclaimer or exclusion of warranties or to any limitations of Licensor's liability under this Specification and Agreement.

14. ACCEPTANCE OF MATERIAL

- 14.1 All components used in the manufacture or construction of materials, supplies and equipment, and all finished materials, shall be new, the latest make/model, of the best quality, and the highest grade workmanship.
- 14.2 Material delivered under this proposal shall remain the property of the bidder until:
- 14.2.1 A physical inspection and actual usage of this material is made and found to be acceptable to the City; and
- 14.2.2 Material is determined to be in full compliance with the specifications and accepted proposal.
- 14.3 In the event the delivered material is found to be defective or does not conform to the specification documents and accepted proposal, then the City reserves the right to cancel the order upon written notice to the bidder and return materials to the bidder at bidder's expense.
- 14.4 Successful bidder shall be required to furnish title to the material, free and clear of all liens and encumbrances, issued in the name of the City of Lincoln, Nebraska, as required by the specification documents or purchase orders.
- 14.5 Selling dealer's advertising decals, stickers or other signs shall not be affixed to equipment. Vehicle mud flaps shall be installed blank side out with no advertisements. Manufacturer's standard production forgings, stampings, nameplates and logos are acceptable.

15. BID EVALUATION AND AWARD

- 15.1 The signed bid proposal shall be considered an offer on the part of the bidder. Such offer shall be deemed accepted upon issuance by the City of purchase orders, contract award notifications, or other contract documents appropriate to the work.
- 15.2 No bid shall be modified or withdrawn for a period of sixty (60) calendar days after the time and date established for receiving bids, and each bidder so agrees in submitting the bid.
- 15.3 In case of a discrepancy between the unit prices and their extensions, the unit prices shall govern.
- 15.4 The bid will be awarded to the lowest responsive, responsible bidder whose proposal will be most advantageous to the City, and as the City deems will best serve their requirements.
- 15.5 The City reserves the right to accept or reject any or all bids; to request rebids; to award bids item-by-item, by groups, or "lump sum"; to waive irregularities and technicalities in bids; such as shall best serve the requirements and interests of the City.

16. INDEMNIFICATION

- 16.1 The bidder shall indemnify and hold harmless the City, its members, its officers and employees from and against all claims, damages, losses, and expenses, including, but not limited to attorney's fees arising out of or resulting from the performance of the contract, provided that any such claim, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property other than goods, materials and equipment furnished under this contract) including the loss or use resulting therefrom; is caused in whole or part by any negligent act or omission of the bidder, any subcontractor, or anyone directly or indirectly employed by any one of them or anyone for whose acts made by any of them may be liable, regardless of whether or not it is caused by a party indemnified hereunder.
- 16.2 In any and all claims against the City or any of its members, officers or employees by an employee of the bidder, any subcontractor, anyone directly or indirectly employed by any of them or by anyone for whose acts made by any of them may be liable, the indemnification obligation under paragraph 16.1 shall not be limited in any way by any limitation of the amount or type of damages, compensation or benefits payable by or for the bidder or any subcontractor under worker's or workmen's compensation acts, disability benefit acts or other employee benefit acts.

17. TERMS OF PAYMENT

- 17.1 Unless other specification provisions state otherwise, payment in full will be made by the City within thirty (30) calendar days after all labor has been performed and all equipment or other merchandise has been delivered, and all such labor and equipment and other materials have met all contract specifications.

18. LAWS

- 18.1 The Laws of the State of Nebraska shall govern the rights, obligations, and remedies of the Parties under this proposal and any agreement reached as a result of this process.

SPECIFICATIONS

ONE (1) GRAPHITE FURNACE ATOMIC ABSORPTION SYSTEM

1. GENERAL INFORMATION

- 1.1 The City of Lincoln invites you to submit a sealed bid for the purchase of **one (1) Graphite Furnace Atomic Absorption System** for the Lincoln Water System (LWS), Lincoln, NE.
- 1.2 The purpose of this system is to perform graphite furnace atomic absorption for the analysis of metals in water. Unit offered shall meet or exceed the requirements stated herein.

2. Bidding Procedure

- 2.1 The bidder is asked to quote a firm base bid price, plus separate quotations for service agreements and extended warranties (See Bidding Schedule and signature page).
- 2.2 The quotation shall be in accordance with these specifications with any exceptions, clarifications, or alternates clearly stated and outlined in detail.
 - 2.2.1 Please complete the enclosed check list indicating any variance to the specifications listed.
 - 2.2.2 The City reserves the right to determine if any variance is of material value to the City. All alternates will be considered.
- 2.3 The bidder shall guarantee performance of the GFAA system. Method detection limits (MDLS) and concentration range shall be in the ranges of those achievable by *Standards Methods for the Examination of Water and Wastewater* (Latest Edition) for metal detection by GFAA (detection limits for specific metals are listed under Detection Limit Requirements under Equipment Specifications of this bid notification).
- 2.3 The quoted price shall remain firm for 60 days after the close of this solicitation, and shall include freight, installation, training and maintenance manuals as stated in the bid specifications

3. BID FORMAT

The bid shall be presented as follows :

- 3.1 Quoted price for required instrumentation/equipment.
- 3.2 Options to the bid shall be presented separately. These options include:
 - 3.2.1 Lamp for manganese and iron detection.
 - 3.2.2 Accessories/equipment necessary for graphite furnace AA auto sampling.
 - 3.2.3 Extended warranty (for 12 months).
 - 3.2.4 Estimated lead time for instrument delivery and installation.
- 3.3 The bidder can provide a written summary of any additional features which are not listed in the specification.

4. DELIVERY, INSTALLATION AND PAYMENT

Bid prices offered shall be new, complete in every way, including freight and delivery costs, ready for use by the City.

- 4.1 Delivery shall be to:

Lincoln Water System
Ashland Water Treatment Plant
Attention: Laboratory Supervisor Lincoln Water Plant
401 Hwy. 6, P.O. Box 144
Ashland , Nebraska 68003.

- 4.2 Payment shall be 90 percent upon delivery and installations with the final 10 percent upon completion of the training and 30 days of satisfactory operation of the system, but not longer than six (6) months from the time the equipment is set up and placed in full operation by the bidder.

5. **SPECIFIC INFORMATION** - All questions regarding these specification must be made in writing to the following:

Tom Kopplin, Assistant Purchasing Agent
"K" Street Complex (SW Wing)
440 So. 8th Street
Lincoln, NE 68508
Email: tkopplin@ci.lincoln.ne.us
Phone: (402) 441-7414
Fax: (402) 441-6513

- 5.1 All questions must be received in the Purchasing Department by no later than, Wed., August 20th, 2003, to allow adequate time to prepare an addendum to mail to all known specification holders.
- 5.2 If the bidder is unable to meet all the required specifications, a written explanation shall be included.

FIRM NAME: _____

EQUIPMENT DETAILS - Complete and return with your offer (#03-217).

GRAPHITE FURNACE ATOMIC ABSORPTION SYSTEM: As per specifications listed herein.
Specify brand/model: _____

MEETS SPEC.
YES **NO**

SYSTEM SPECIFICATION

ATOMIC SPECTROMETER

- | | | | |
|-------|-----|-----|--|
| ___ | ___ | 1. | <u>General Description:</u> One GFAA will be supplied. The standard GFAA shall consist of the following: appropriate graphite parts and supplies and detectors. |
| ___ | ___ | 1.1 | The GFAA system will be capable of performing variable temperature programming for removing solvent and matrix components from water samples for the analysis of inorganic contaminants. |
| ___ | ___ | 2. | <u>Graphite Furnace:</u> The GFAA assembly shall utilize pyrolytic coated graphite tubes or current technology as described by the bidder to prevent carbide interferences and peak tailing. |
| ___ | ___ | 2.1 | The GFAA assembly shall be an electrically heated device with electronic control circuitry to carry a graphite tube through the specified heating program. |
| ___ | ___ | 2.2 | Five or more heating stages for analyses with the GFAA will be supplied. |
| ___ | ___ | 2.3 | The ability to change temperature settings to maximize sensitivity is required. |
| ___ | ___ | 2.4 | The ability to adjust slit settings is required. If this is manually or electronically done, it should be noted. |
| ___ | ___ | 2.5 | A description of lamps should be included, such as, but not limited to: the number of HC lamps that can be accommodated with a minimum number of two required; |
| ___ | ___ | 2.6 | A minimum requirement of a background correcting D2 lamp or alternate technology and must be described in full. |
| ___ | ___ | 3. | <u>Lamps:</u> Hollow-cathode lamps for single element detection for manganese and iron. |
| ___ | ___ | 3.1 | If electrode-less discharge lamps (EDL) are included in the bid, these lamps must be shown to have better sensitivity and detection limits than the hollow-cathode lamps |
| ___ | ___ | 4. | <u>Furnace Unit:</u> Description must include method for achieving optimal height and position of furnace head: i.e. manual or automatic. |
| | | 4.1 | <u>Heating control:</u> method of drying and ashing/atomization conditions. |
| | | 4.2 | Recommended inert gas used (argon preferred) as well as rate of consumption. |
| <hr/> | | | |
| ___ | ___ | 5. | <u>Gas System:</u> Gas control specifications must include but not be limited to information on flow rate, pressure control and safety measures. If a Flame head is included in this bid include information on gas safety mechanism. Examples of this are not limited to the following: Automatic leak checks, flashback prevention method, non-combusted fuel release prevention, flame extinction's upon power outage or interruption, drain tank monitors, flow rate monitors control and optimization of flow and pressure. (Include on a separate sheet attached to this section of the bid, referencing "gas system"). |

MEETS SPEC.
YES NO

SYSTEM SPECIFICATION

—	—	5.1	The instrument shall include all fittings to connect to a standard US gas system.
—	—	5.2	The system shall be capable of a gas-interrupt mode of operations during GFAA sample atomization.
—	—	5.3	The ability to accurately control the gas flows either manually or electronically.
—	—	6.	<u>Detection Limit Requirements:</u> The GFAA shall be capable of achieving a detection limit of at maximum 0.5 microgram per liter (µg/L) for manganese, 1 µg/L for iron.
—	—	6.1	<u>Spectrophotometer:</u> Must include but not be limited to wavelength range, bandwidth in nano-meters ex: Wavelength range 190 to 900 nm. Bandwidth 0.1, 0.2, 0.5, 1.0, 2.0, 5.0 nm (6-step automatic)
—	—	6.2	<u>Auto sampler:</u> The auto sampler shall be made specifically to work with the instrument being bid.
—	—	6.2.1	The auto sampler shall be capable of dispensing between 2 and 70 µL of sample for GFAA testing.
—	—	6.2.2	The GFAA auto sampler shall be capable of adding a minimum of two different matrix modifier solutions either prior to injection or during injection into the GFAA.
—	—	6.2.3	The GFAA auto sampler shall hold at least 60 disposable sample cups/vials.
—	—	6.2.4	If a FAA is included, any accessories (trays, vials/cups, or instrumentation) needed for auto sampling during FAA shall be presented as option to the bid.
—	—	6.2.5	The auto sampler must be able to dilute up to two stock standards to make a calibration curve of up to 5 points, plus a blank.
—	—	6.2.6	Auto sampler must be able to dilute samples that exceed concentration of the highest standard by using multiple alternate volumes.
—	—	6.2.7	The auto sampler must have variable pipetting speed and volumes.
—	—	6.2.8	The auto sampler must be able to perform spiking of samples in selected positions or set increments with user defined spiking and acceptance levels.
—	—	6.3	<u>Chiller:</u> If a chiller is required, all specifications and requirements must be included. This should include Electrical, space requirements , coolant type and rate of coolant consumption.
—	—	7.	<u>Computer Requirements for GFAA System:</u> One complete copy of an atomic absorption application software package, to be loaded on an IBM or IBM compatible PC , shall be provided with the GFAA system.
—	—	7.1	This software package shall utilize the most current Microsoft Windows applications program.
—	—	7.2	Software package should enable the computer to perform live data acquisition while being used for other task(s). (e.g., includes but is not limited to the ability to execute spreadsheet software or word processor during measurement, as well as view, manipulate and make reports using data from stored data.)
—	—	7.3	The bidder should include complete specifications and documentation for this software in the bid package.
—	—	7.4	All data is to be generated with individual sample I.D.'s, time & date of collection, statistics, standard calibration curve, peak profiles, peak height and peak area values. All data shall be automatically saved to disk in permanent files, if selected.
—	—	7.5	The software must have the ability to perform concentration computation: calibration curve method (Choice of 1 st , 2 nd , and 3 rd order functions).
—	—	7.6	The software must have the ability to perform standard addition method and simple standard addition method.
—	—	7.7	The software must have the ability to perform repeat analysis with the number of repetitions available. It must have the ability to give mean value, standard deviation (S.D.) and coefficient or variation (R.S.D.) on the display screen as well as in reports.

MEETS SPEC.
YES NO

SYSTEM SPECIFICATION

___	___	7.8	The software must have the ability to do automatic exclusion of deviant values using set S.D. and % R.S.D.parameters.
___	___	7.9	The software must have the ability to perform Baseline correction, also to do automatic drift correction and method for achieving this correction.
___	___	7.10	The software must have the ability to do sensitivity correction: Automatic calibration correction with sensitivity monitoring.
___	___	7.11	The software must have the ability to perform tabular data processing: Calculation of final concentrations from sample volumes, lab bench dilutions, auto sampler dilutions and weight factors.
___	___	7.12	The software must have the ability to recall parameters: Template functions available and information on ability to store data as well as information on spreadsheet compatibility.
___	___	7.13	The software must have the ability to generate summary reports as well as detailed sample reporting.
___	___	7.14	The software must have the ability to give data regarding QA/QC; Correlation coefficient, QC, LCS, SPK, and sample upper limit, % RSD.
___	___	7.15	The software system will be ungradable to allow for future lab expansion.
___	___	7.16	The software will enable users to utilize screens for setting GFAA operating parameters such as the temperature programming, changing lamps, controlling the auto sampler and controlling the gas flows. All parameters used to perform a run will be saved as part of the method and down-loaded to the sample data file when the analysis is conducted.
___	___	7.17	During data acquisition, the detector response will be displayed in a continuously updated display. The analyst will be able to check peak shapes of major components and view trace components at full scale.
___	___	7.18	The Data collected in the program will be formatted so it can be transferred as access to other MS-DOS compatible data bases, spreadsheets and word processing software for customized reporting and further statistical analysis.
___	___	7.19	The software will provide built-in report customization and summary reporting with basic statistics.
___	___	7.20	The software will provide the ability to manipulate data from previous samples while acquiring data.
___	___	8.	<u>PC Hardware:</u> The bidder shall supply a computer hardware system which meets these and the following specifications for installation of the software. The software shall be compatible with the following minimum PC hardware and printer components now being used by Lincoln Water System.
___	___	8.1	IBM Compatible, Pentium 4
___	___	8.2	Disk Cache
___	___	8.3	256 Meg Ram
___	___	8.4	Must include but not be limited to all computer hardware and software needed to run the instrument. Computer components must include the operating system.
___	___	8.5	CPU and CRT
___	___	8.6	Hard disk with capacity for one years data storage or 20 GIG which ever is greater.
___	___	8.7	CDRW drive, ability to attach an external back up device.
___	___	8.8	1.44 Meg Floppy Disk Drive
___	___	8.9	Windows (most current version compatible with bidders software)
___	___	8.10	SVGA Video Card
___	___	8.11	Any and all Interface Cards for the GFAA
___	___	8.12	All cables (including additional cable to connect to the Printer
___	___	8.13	Minimum two extra expansion slots

MEETS SPEC.

SYSTEM SPECIFICATION**YES****NO**

- | | | |
|-----|-----|---|
| ___ | ___ | 9. <u>Training Course</u> : Do you offer a Graphite Furnace/Flame AA Analyses Training Course? Respond to the following: |
| ___ | ___ | 9.1 A Graphite Furnace/Flame AA Analyses Training Course designed to train the users of this GFAA system shall be provided at Lincoln Water System's Laboratory facility located in Ashland , Nebraska for five individuals. |
| ___ | ___ | 9.2 Qualified instructors shall be provided to conduct this course which is expected to extend over two eight-hour working days. These two days are separate from installation time. |
| ___ | ___ | 9.3 The course should address: Operating principles and model specific operating procedures for the complete GFAA system, including the GFAA instrument, the autosampler, the FAA system, and the use of the software supplied with the system. |
| ___ | ___ | 9.4 Proper ongoing maintenance of the equipment. |
| ___ | ___ | 10. <u>Power Requirements</u> : All power specifications for AA and all components must be made clear in bid submittal documents. Any special, unique or non-standard requirements must be made known by the bidder. |
| ___ | ___ | 11. <u>Warranty</u> : The bidder shall warrant all materials and workmanship for all equipment supplied for a minimum of 12 months following installation at the site. |
| ___ | ___ | 11.1 Any defective portions which are repaired or replaced shall be guaranteed for an additional 90 days. |
| ___ | ___ | 11.2 All costs for warranty work shall be borne by the bidder. |
| ___ | ___ | 11.3 Extended warranty (parts, labor and travel) for 12 months following expiration of the initial 12 month warranty shall be quoted individually and collectively as an option to the bid. |
| | | 11.4 Warranty Repair Location: _____ |
| | | 11.5 Number of Technicians certified to repair this equipment: _____ |
| ___ | ___ | 12. <u>Preventative Maintenance/Service</u> : Provide with your bid a break out price on a yearly service contract including preventive maintenance. |
| ___ | ___ | 13. <u>Operation and Maintenance Manuals</u> : Adequate operation and maintenance information shall be supplied for all equipment requiring maintenance or other attention. The original copy plus one of each manual shall be produced on CD Rom and in bound hard copy. |
| ___ | ___ | 13.1 Operation and maintenance manuals shall include the following: |
| ___ | ___ | 13.1.1 Table of Contents and Legends Abbreviations listing. |
| ___ | ___ | 13.1.2 Equipment, normal operating characteristics and limiting conditions. |
| ___ | ___ | 13.1.3 Assembly, installation, adjustment and checking instructions. |
| ___ | ___ | 13.1.4 Operating instructions for start-up, routine and normal operation, shutdown and emergency conditions. |
| ___ | ___ | 13.1.5 Maintenance instructions. |
| ___ | ___ | 13.1.6 Guide to "troubleshooting". |
| ___ | ___ | 13.1.7 Bills of Materials and spare parts lists. |
| ___ | ___ | 13.1.8 Test data and performance curves, where applicable. |
| ___ | ___ | 13.2 The operation and maintenance manuals shall be in addition to any instructions or parts lists packed with or attached to the equipment when delivered, or which may be required by Owner. |
| ___ | ___ | 13.3 The bound copies of the operation and maintenance manuals as well as CD shall be prepared and delivered to Owner not later than 15 days prior to placing the equipment in operation. |
| ___ | ___ | 13.4 Shipment of equipment shall not be considered complete until all required manuals have been received. |

14. REFERENCES

Provide three references for governmental agencies, or private organizations that are currently using this proposed equipment.

Firm Name: _____
Address: _____
Contact Name: _____ Title: _____
Phone Number: _____ Fax: _____
Approximate date and number of units installed: _____

Firm Name: _____
Address: _____
Contact Name: _____ Title: _____
Phone Number: _____ Fax: _____
Approximate date and number of units installed: _____

Firm Name: _____
Address: _____
Contact Name: _____ Title: _____
Phone Number: _____ Fax: _____
Approximate date and number of units installed: _____

COMMENTS:

Firm Name

Signature

Date